



U.S. Department  
of Transportation  
**Research and  
Special Programs  
Administration**

NOV 9 2000

400 Seventh St., S.W.  
Washington, D.C. 20590

DOT-E 9491  
(FOURTH REVISION)

EXPIRATION DATE: October 31, 2002

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: E.I. du Pont de Nemours & Company, Inc.  
Wilmington, Delaware

(See Appendix A to this document for a list of additional grantees)

2. PURPOSE AND LIMITATION:

- a. This exemption authorizes the transportation in commerce of certain compressed gases in DOT specification 3AL cylinders. This exemption provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein.
- b. The safety analyses performed in development of this exemption only considered the hazards and risks associated with transportation in commerce.

3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.

4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR §§ 173.302 and 173.304 in that DOT 3AL specification cylinders are not authorized for charging the materials described in paragraph 6, except as specified herein.

5. BASIS: This exemption is based on the application of Du Pont Company dated August 30, 2000, submitted in accordance with § 107.109.

NOV 9 2000

Continuation of DOT-E 9491(4th Rev.)

Page 2

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Proper Shipping Name/ Hazardous Materials Description	Hazard Class/ Division	Identi- fication Number	Packing Group
Hexafluoroethane, compressed or Refrigerant gas R 116	2.2	UN2193	n/a
Trifluoromethane or Refrigerant gas, R 23	2.2	UN1984	n/a

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Packagings prescribed are DOT Specification 3AL cylinders. The liquid portion of trifluoromethane may completely fill the cylinder at or below 130°F, provided the pressure at the critical temperature does not exceed one and one-fourth times the service pressure.

Minimum cylinder service pressures and maximum filling densities are as follows:

	<u>Trifluoromethane</u> <u>R23</u>	<u>Hexafluoroethane</u> <u>R116</u>
Cylinder service pressure	1800	1800
Maximum filling density (%)	84.4	112.0
Pressure at 70°F(psig)	605	970
Pressure at 130°F(psig)	2045	2240

8. SPECIAL PROVISIONS:

a. A person who is not a holder of this exemption who receives a package covered by this exemption may reoffer it for transportation provided no modifications or changes are made to the package and it is reoffered for transportation in conformance with this exemption and the HMR.

b. A current copy of this exemption must be maintained at each facility where the package is offered or reoffered for transportation.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, cargo vessel, cargo aircraft only, and passenger-carrying aircraft.
10. MODAL REQUIREMENTS: A current copy of this exemption must be carried aboard each cargo vessel, aircraft or motor vehicle used to transport packages covered by this exemption. The shipper must furnish a copy of this exemption to the air carrier before or at the time the shipment is tendered.
11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this exemption and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:
- o All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
  - o Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this exemption must receive training on the requirements and conditions of this exemption in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this exemption, including display of its number, when this exemption has expired or is otherwise no longer in effect.

12. REPORTING REQUIREMENTS: The carrier is required to report any incident involving loss of packaging contents or packaging failure to the Associate Administrator for Hazardous Materials Safety (AAHMS) as soon as practicable. (Sections 171.15 and 171.16 apply to any activity undertaken under the authority of this exemption.) In addition, the holder(s) of this exemption must inform the AAHMS, in writing, of any incident involving the package and shipments made under the terms of this exemption.

Issued in Washington, D.C.:



NOV 9 2000

(DATE)

*For* Robert A. McGuire  
Associate Administrator for  
Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Research and Special Programs Administration, Department of Transportation, Washington, D.C. 20590.  
Attention: DHM-31.

The original of this exemption is on file at the above office. Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

Copies of exemptions may be obtained from the AAHMS, U.S. Department of Transportation, 400 7th Street, S.W., Washington, DC 20590-0001, Attention: Records Center, 202-366-5046.

PO: KFW

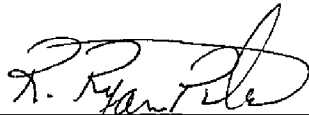
NOV 9 2000

Continuation of DOT-E 9491(4th Rev.) APPENDIX A

Page 5

The following are hereby granted party status to this exemption based on their application(s) submitted in accordance with § 107.107 or § 107.109, as appropriate:

Company Name City/State	Application Date	Issue Date	Expiration Date
Air Products and Chemicals, Inc. Allentown, PA	Aug 19, 2000	NOV 9 2000	Oct 31, 2002
BOC Gases, Inc. Murray Hill, NJ	Jul 19, 2000	NOV 9 2000	Oct 31, 2002
Matheson Tri Gas East Rutherford, NJ (Former grantee: Matheson Gas Products)	Sep 19, 2000	NOV 9 2000	Oct 31, 2002



*for* Robert A. McGuire  
Associate Administrator for  
Hazardous Materials Safety